



Australian Government

ICTTEN429 Estimate and quote for carrier telecommunications equipment installations

Release: 1

ICTTEN429 Estimate and quote for carrier telecommunications equipment installations

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to prepare detailed estimates and quotes, including updating schematic drawings and specifications for carrier telecommunications equipment installations.

It applies to technical staff who provide estimates and quotes to clients for indoor and outdoor installation within a carrier network for commercial or industrial communications installations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Telecommunications – Telecommunications Networks Engineering

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm and update schematic drawings and specifications	1.1 Review existing specifications and drawings for completeness 1.2 Prepare additional drawings and specifications for installation if required 1.3 Compare drawings with design brief to confirm requirements 1.4 Confirm all cable and locations with carrier
2. Price labour, materials and other relevant items	2.1 Obtain quotations and delivery dates from suppliers 2.2 Use schedule of rates for scheduled items

ELEMENT	PERFORMANCE CRITERIA
and establish availability	2.3 Obtain quotes and supply dates for all non-scheduled items or activities 2.4 Estimate labour costs based on company practices 2.5 Check pricing documentation to ensure supply proposal matches carrier specification for material, quality and performance
3. Estimate labour, materials and other relevant item requirements	3.1 Prepare estimations allowing for contingencies during installation and relevant legislation, codes, regulations and standards 3.2 Ensure estimates will return a profit on installation where appropriate
4. Prepare and confirm quote with carrier	4.1 Prepare a project installation quote that meets carrier requirements 4.2 Negotiate changes and variations to meet carrier and company needs
5. Establish carrier's financial arrangements	5.1 Obtain carrier's approval for project design drawings and estimate 5.2 Issue design drawings and specifications for authority to construct

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1-2.5	Analyses and consolidates information and data from a range of sources, against defined criteria and requirements, and checks for accuracy and completeness
Writing	1.2, 1.3, 2.1, 3.1, 3.2, 4.1, 5.1, 5.2	- Documents outcomes and changes to plans using industry-relevant terminology and recognised plan symbols - Accurately records and completes organisational plans, specifications and correspondence using clear language and correct spelling, grammar and industry terminology
Oral Communication	1.4, 2.1, 4.2, 5.1	Uses collaborative and inclusive techniques including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information and confirm understanding

		Presents complex information in formal situations using clear and convincing language, tone and pace appropriate for the audience and purpose
Numeracy	2.1-2.5, 3.1, 3.2	- Applies financial modelling skills to identify, analyse and evaluate budgetary information, time durations and human resource allocations - Performs mathematical calculations to analyse labour, costs and quantities to accurately process quotations
Navigate the world of work	2.4, 3.1, 4.1	- Ensures knowledge of legislative requirements and products is kept up-to-date to provide accurate information - Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	1.4, 4.2, 5.1, 5.2	- Selects and uses appropriate conventions and protocols when communicating with clients and co-workers in a range of work contexts - Uses a range of strategies to establish a sense of connection and build rapport with clients and co-workers
Get the work done	1.1-1.4, 2.1-2.5, 3.1, 5.2	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Makes decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Addresses less predictable problems and initiates standard procedures in response, applying problem-solving processes in determining a solution - Uses familiar digital technologies and systems to access information, enter data, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN429 Estimate and quote for carrier telecommunications	ICTTEN4244A Estimate and quote for carrier telecommunications	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalenc e status
equipment installations	equipment installations	Training Packages.	

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTTEN429 Estimate and quote for carrier telecommunications equipment installations

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Performance Evidence

Evidence of ability to:

- prepare detailed estimates
- update schematic drawings and specifications for telecommunications equipment installations including:
 - materials
 - labour costs
- negotiate material availability and pricing for carrier equipment and network installations with contractors
- document detailed quotes for installations that allow for changes and variations
- prepare and confirm quote and financial arrangements with carrier.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- compare and contrast features of carrier telecommunications equipment
- identify and summarise application of legislation, codes of practice and other formal agreements that impact the work activity
- analyse and document the manufacturer's requirements for safe operation of equipment
- describe processes and techniques required to prepare plans, estimate and quote for installations
- identify and apply specific work health and safety (WHS) requirements relating to design and site conditions
- identify and remedy typical issues and challenges of dealing with carriers
- explore allocations to be included in the design specifications and quotation
- determine common contingencies to consider in a specification or quotation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the telecommunications networks engineering field of work and include access to:

- special purpose tools, equipment and materials
- sites on which estimates and quotes may be conducted
- relevant databases and licensing requirements
- site-related documentation.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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